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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MINWEN JI

Appeal 2009-007303
Application 10/687,798
Technology Center 2400

Before JOHN C. MARTIN, MAHSHID D. SAADAT,
and THOMAS S. HAHN, *Administrative Patent Judges*.

SAADAT, *Administrative Patent Judge*.

DECISION ON APPEAL¹

¹ The two month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304 or for filing a request for rehearing as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

Appellant appeals under 35 U.S.C. § 134(a) from a Final Rejection of claims 1-16 and 19-26. Claims 17, 18, and 28 are cancelled.² Claims 27 and 29 are allowed. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm-in-part.

STATEMENT OF THE CASE

Appellant's invention relates to:

A method for managing traffic flow through a multipath network and systems and apparatuses configured to employ such a method are provided. The method includes forwarding a packet along a first link of the multipath network and tracking a load of the first link subsequent to forwarding the packet. In addition, the method includes preserving the first link for a subsequent packet having the same flow address as the forwarded packet upon determining a desired load change of the first link is less than a predetermined value.

(Abstract.) Claims 1 and 9, which are illustrative of the invention, read as follows:

1. A method for managing traffic flow through a multipath network, comprising:

forwarding a packet along a first link of the multipath network;

tracking a load of the first link subsequent to forwarding the packet; and

preserving the first link for a subsequent packet having the same flow address as the forwarded packet upon determining a desired load change of the first link is less than a predetermined value.

² We note an inconsistency in the record as to the status of claims 17 and 18 (*see* App. Br. 5; Ans. 2; *but c.f.* App. Br. 9; Ans. 4). Our review of the record indicates that claims 17 and 18 are cancelled and, therefore, we do not address claims 17 and 18.

9. A computer-readable storage medium comprising program instructions that are executable by a processor and that cause the processor to:

adjust positions of one or more pointers used to partition traffic flow through a multipath network, wherein the positions of the one or more pointers are variable relative to a range of hash units that correspond to flow addresses within the multipath network.

The Examiner relies on the following prior art in rejecting the claims:

Cain	US 4,905,233	Feb. 27, 1990
Li	US 6,381,252 B1	Apr. 30, 2002

Claims 1-6 stand rejected under 35 U.S.C. § 102(b) as anticipated by Cain.

Claims 7-16 and 19-26 stand rejected under 35 U.S.C. § 103(a) as obvious over Cain in view of Li.

Rather than repeat the arguments here, we make reference to the Briefs (App. Br. filed Aug. 11, 2008; Reply Br. filed Dec. 29, 2008) and the Answer (mailed Oct. 30, 2008) for the respective positions of Appellant and the Examiner. Only those arguments actually made by Appellant have been considered in this decision. Arguments that Appellant did not make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

ISSUES

Claims 1, 9, 16, and 23 are independent claims. In arguing for the patentability of claims 1-8, Appellant argues that Cain does not teach routing based on whether a desired change in traffic loading that would result from a link change meets or exceeds a threshold, as required by claim 1 (App. Br. 10-11). In arguing for the patentability of claims 9-16 and 19-26, Appellant

contends that Li does not teach or suggest using one or more pointers for partitioning traffic flow by defining boundaries between ranges of hashed flow addresses or hash units, as recited in claim 9 (App. Br. 11-13), which was determined by the Examiner (Ans. 5) to be missing in Cain.

Additionally, Appellant asserts that independent claims 16 and 23 include similar limitations as those in claim 9 (App. Br. 13-14). Therefore, based on Appellant's contentions, the pivotal issues are:

Does Cain disclose “determining a desired load change of the first link is less than a predetermined value,” as recited in claim 1?

Does Cain, in view of Li, make obvious “adjust[ing] positions of one or more pointers used to partition traffic flow through a multipath network, wherein the positions of the one or more pointers are variable relative to a range of hash units that correspond to flow addresses within the multipath network,” as recited in claim 9?

ANALYSIS

Claim 1

The Examiner reads the limitation of “preserving the first link for a subsequent packet having the same flow address as the forwarded packet upon determining a desired load change of the first link is less than a predetermined value” on Cain at column 2, lines 36-55 (Ans. 3), column 21, lines 55-59 (Ans. 11), and column 22, lines 15-34 (Ans. 11).

Appellant contends that the term “desired load change” has a specific definition in the Specification at paragraph [0031] (App. Br. 10). The passage relied on states that “[a] ‘desired load change’, as used herein, *may generally* refer to the load change needed to balance the loads on each path

or link emerging from a router, based upon the load balancing policy in the router” (Spec. ¶ [0031] (emphasis added)). Relying on this alleged definition, Appellant contends that while Cain does monitor traffic congestion, monitoring traffic congestion can be performed in a number of ways, and that Cain does not teach monitoring the “desired load change” (App. Br. 11; Reply Br. 1). Appellant further contends that Cain does not disclose “determining whether a [desired] change in the load is above or below a predetermined value” (App. Br. 11, *see also* Reply Br. 1).

We find that the portion of the specification cited by Appellant is an example, and not a definition of the claim term. Accordingly, it does not provide a basis for distinguishing the claim from the prior art. Therefore, we sustain the 35 U.S.C. § 102 rejection of claim 1 and of dependent claims 2-6, which were not argued separately. We also sustain the 35 U.S.C. § 103 rejection of claims 7 and 8, which depend from claim 1 and for which no separate substantive argument was presented (App. Br. 11-12).

Claim 9

The Examiner reads the limitation of “adjust[ing] positions of one or more pointers used to partition traffic flow through a multipath network, wherein the positions of the one or more pointers are variable relative to a range of hash units that correspond to flow addresses within the multipath network” on Cain’s partitioning traffic at column 2, lines 36-55, in combination with Li at column 4, lines 17-54, which discloses using a pointer to select a channel (Ans. 5). The Examiner concedes that the use of hash units is not disclosed by either Cain or Li, but asserts that “hashing is well known . . . and . . . can be used in Cain’s multiple path mechanism” (Ans. 5).

Appellant contends:

that although Li does teach the use of pointers to expressly select an individual channel, Li does not teach or even suggest using one or more pointers to partition traffic flow by defining boundaries between ranges of hashed flow addresses (hash units) [which] is an inherent characteristic resulting from the pointer positioning required by the claim.

(App. Br. 12 (emphasis omitted).) Appellant further contends that the passage of Li relied on by the Examiner “is silent as to pointer positions that are variable relative to a range of ‘hash units’ that correspond to flow addresses” (App. Br. 12-13). The thrust of Appellant’s argument is that Li’s pointer selects a channel rather than partitions flow between channels based on hashed flow addresses.

We agree with Appellant and find that Li, alone or in combination with Cain, does not teach or suggest “adjust[ing] positions of one or more pointers used to partition traffic flow through a multipath network, wherein the positions of the one or more pointers are variable relative to a range of hash units that correspond to flow addresses within the multipath network,” as recited in claim 9. We note that independent claims 16 and 23 include similar limitations as those in claim 9 which we found to be absent from the combination of Cain and Li. Therefore, we do not sustain the 35 U.S.C. § 103 rejection of claims 9, 16, and 23, nor of claims 10-15, 19-22, and 24-26 dependent thereon.

ORDER

The decision of the Examiner to reject claims 1-8 is affirmed. The decision of the Examiner to reject claims 9-16 and 19-26 is reversed.

Appeal 2009-007303
Application 10/687,798

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED-IN-PART

babc

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